

473  
Compliments of

Dr. S. A. Knopf

613 53

# The Tenement and Tuberculosis:

—An address by—

S. A. KNOPF, M. D.,

Delivered before a conference held under the auspices

—of the—

Tenement House Committee,

—of the—

CHARITY ORGANIZATION SOCIETY,

New York, February 20, 1900.

After the discussion of Dr. S. A. Knopf's address the following resolution was proposed and unanimously adopted:

**Resolved**,—that it is the sense of this meeting that the bill now before the Legislature, providing for an appropriation of \$200,000 for the erection of a State Sanatorium for the treatment of incipient cases of consumption, should receive careful attention by the Finance Committee of the Senate, and that the bill should be favorably acted upon as soon as possible, and that a copy of Dr. Knopf's address be placed in the hands of every member of the Legislature at once.

LCPL  
AC 3105  
K 56  
1900



The Tenement House Exhibition was open to the public at No. 404 Fifth Avenue (southwest corner 37th street) daily from February 12 to February 24, inclusive, from 2.30 to 6.30 and 7.30 to 10.30 P. M.

The Exhibition included Models, Plans, Photographs, Maps, Charts, and Tables of Statistics, showing existing conditions in New York Tenement Houses, Model Tenements all over the world, Suburban Dwellings, Lodging Houses, Health Conditions, Poverty Conditions and Agencies for Betterment, Competitive Plans for Model Tenements, Parks and Play Grounds, etc., etc.

From February 19 to February 24, upon each evening at 8.30, at the Exhibition Building, were held a series of Conferences and Public Discussions of the questions involved.

The present condition of the tenement houses of this city is so serious that the evils arising therefrom are a distinct menace to the welfare of the community. There are at present over 44,000 tenement houses in the old City of New York, and new tenement houses are being erected at the rate of about 2,000 a year. These are, in many respects, worse than the old buildings erected thirty years ago. They are badly constructed and so planned that many rooms depend for their light and air entirely upon long, narrow, dark, "airshafts," which, instead of giving light and air, are merely stagnant wells, emitting foul odors and diseases.

In view of these facts this Exhibition was prepared for the purpose of stimulating interest in this question by placing before the public in concrete form a clear and comprehensive statement of existing conditions, so that intelligent action might be taken to remedy them and to prevent their recurrence.

The solution of the tenement-house problem lies along three distinct lines :

- I. Through the enactment of wise restrictive legislation.
- II. Through the building of model tenement houses as commercial enterprises.
- III. Through the improvement and proper management of existing old tenement houses and the condemnation of buildings which are unfit for habitation.

## THE TENEMENTS AND TUBERCULOSIS.

*Mr. Chairman, Members of the Tenement House Committee, Ladies and Gentlemen :—*

If I should be asked what conditions are most conducive to the propagation of tuberculosis and especially pulmonary consumption, I would have to reply, the conditions that prevail in the old-fashioned tenement houses as they still exist by the thousand in this and other large cities. In these tenements there are not only a far greater number of consumptives than in the same area elsewhere, but the proportion is actually greater per number of inhabitants. Thus they not only contain countless centers of infection for old and young, and multiple foci of reinfection for those already afflicted, but these dwellings with their bad air, darkness, and filth make a cure of the disease impossible and a lingering death for all those infected by the germ of tuberculosis a certainty. If anyone thinks me an alarmist, let him glance at the charts exhibited in this building. There he will see that there are houses in which can be counted as many as twenty consecutive cases of tuberculosis during the last four years. This number represents, however, only the cases reported to the board of health. Now, you must not think for a moment that these represent the actual number of cases of tuberculosis existing in that particular tenement. They are only the ones where the disease had so far advanced that medical aid became imperative, a physician had to be called in, and the case was reported. But how many of the moderately advanced cases are made known to either physician or board of health? I venture to say those not-reported are more numerous than the reported ones. They constitute that class of pulmonary invalids who are still able to work, and who imagine themselves to be suffering only from chronic bronchitis, and the equally large number of children suffering from tuberculous manifestations other than pulmonary. To the uninitiated it may sound like a paradox when I say that the tuberculous invalid who is still up and about, perhaps supporting his family, is often the greatest danger to the community, to his friends, his neighbors, and to those who may succeed him in the tenement he lives in. It is this class of consumptives, which, from either ignorance or carelessness, spread their disease broadcast by depositing their infectuous sputum everywhere without any regard to the danger.

In the many discussions which were raised during the past few months previous to the framing of the bill to establish a state sanatorium for the treatment of incipient cases of pulmonary tuberculosis, it was repeatedly argued that we should rather isolate first the advanced and hopeless cases. I appreciate the necessity of public care for this class of patients very much indeed, but the advanced and hopeless poor consumptive is usually confined to one or two rooms, and while ten to one he will infect these thoroughly, he can not do as much harm as he used to when he was still up and about and could spit in the

dark hall-ways of the tenement, on the floor of his workshop, in the street-car, or wherever his calling may have led him. Thus the advantage of curing an incipient case of pulmonary tuberculosis is inestimable. Leaving aside the direct benefit to the commonwealth by making a breadwinner and useful citizen of this pulmonary invalid, who himself, and also perhaps those depending upon him, might have become otherwise a burden to the community, it is beyond calculation to say how many lives may have been saved by curing that one man before he had a chance to disseminate his disease among his fellow-men in the manner just described. As to what extent he may do this you can perhaps perceive if I recall to you the fact that the average number of bacilli which the up-and-about consumptive expectorates daily is estimated to be seven billions.

But let us return to our main subject and try to find some explanation for the fearful condition which makes pulmonary tuberculosis an endemic disease of the tenement house. I pointed out to you that there were houses where an unusual number of consumptives have lived and died during the past few years. Now, let us pay a visit to one of them. We pass the throng in the narrow street, make our way through the crowds of children playing on the sidewalk, and enter the dark hallway. The first thing that greets us is the odor peculiar to badly housed humanity. You can not define it, but I know many of you who labor among the poor know it only too well. Have you ever thought what this odor really means? It represents the exhalation of a multitude of people, the toxic products expelled during the process of expiration, which settle on the walls, ceiling, and stairs of these hallways. Chemistry has not yet been able to fix its composition; we know it exists and we know its deleterious influence on the individual who is obliged to live constantly in such a house. Some very prosaic people call this smell the smell of humanity, or the smell of poverty. I do not quite like these names, for I do not think them either appropriate or just. There can be humanity without smell, and amidst poverty there can be the sweet atmosphere of cleanliness and purity. If the bad odor we perceive in our wanderings through those dark halls must have a name let us call it the smell of ignorance and greed. It is the result of ignorance on the part of the poor housed there, who do not know the value of fresh air, sunlight, and the cleansing property of water—the trinity which, in combination, are the best antitoxine against those poisonous products. It is the result of greed on the part of the owner, for only a heartless man could tolerate such a condition of filth, foul air, and darkness, as is characteristic of these tenement halls.

We ascend one or more flights of stairs, in the rear or front, it makes little difference, since there is probably a consumptive on each floor. Owing to the expense of artificial lighting the halls are, of course, very dim and though we cannot see the dirt on the ballustrades we feel that it is there and only reluctantly take hold of them in order not to fall. We arrive at the rooms we are seeking. A knock at the door, a feeble invitation to come in, and we are in the midst of tuberculosis. There are two or three small rooms, but only one receives direct

air and light. In a dark small bedroom lies the patient ; there is a different odor in this room, a distinct smell of disease mingled with the odor of cooking. We ask to have the window open, but the patient fears the draft. He is a husband and the father of six children of whom two have died within the last year. The youngest of the remaining children is a few months old ; the eldest, a girl of ten, attends to the household duties while the mother goes out to work. We greet our consumptive friend lying there, bid him cheer, and tell him we came to investigate his case. He faintly smiles, and we ask him to tell his story. In a feeble voice, interrupted by fits of coughing, he tells us that up to two years ago he was a strong and vigorous man, he had a good position as a mechanic, lived in a better tenement than now, and drank only occasionally when life at home became too dull. Once he caught a severe cold. He went to a doctor. A few weeks of rest and some' medicine and he got well. After some months another cold ;—the same treatment, the same result. And then again a cold, and so on, until the periods between the times when he could labor and earn, became longer and longer. The savings from better times disappeared gradually ; a cheaper tenement was sought ; the visits to the doctor were given up, and the patient finally ceased to work entirely. To go to the dispensary was too much of an exertion. The faithful wife nursed him tenderly, but soon all the savings were gone. The burial of the two little ones—one having died of bowel complaint and the other of brain trouble—had cost so much that the mother decided to go out to work in order to support the family. While listening to the pitiful story we look around the scantily furnished rooms. The babies are playing on the dirty floor touching everything with their little hands, putting their fingers in their mouths, and inhaling the dust laden with disease germs. When we consider that this case has only been reported a few weeks ago, and that until then the patient had hardly taken any care with his expectorations, can we wonder that two of the children died within a few months, one from bowel-complaint—which probably was nothing else than intestinal tuberculosis—and the other from brain trouble, which is only another name for tuberculous meningitis. The remaining little ones look pale and underfed. The little mother preparing the evening meal has seemingly a better appearance. She has to do so much running out in the street to buy the provisions for the family that she gets more air, and if the father does not feel too badly she wheels out the baby sometimes. Yet to the experienced eye ,there are already traces of overwork in this delicate child organism. The precautions the patient takes now with his expectoration consist in having placed before him on the floor a cuspidor partially filled with some antiseptic fluid. Owing to his weakness he does not always succeed in depositing his sputum exactly in the center and sometimes he even fails to hit the vessel at all. We call his attention to this lack of precaution and advise him to use a light mug which he can bring near to him, or moist rags which he should have burned in the evening on his wife's return.

We bid adieu to this interesting family to visit another case which had been reported two flights higher up. But on the next floor we pass a door wide open and

hear the rattling of sewing machines, suddenly interrupted by a terrible cough. We halt and listen for a moment. Another cough of different pitch, coming evidently from another person. We enter—again a different picture. The air is filled with dust and steam, the odor indescribable. The room is filled with people; an elderly man with dark features a velvet cap on his head, a wife, a son, a daughter-in-law, two young girls and a number of children, all in one room. The grown persons working over their machines or pressing garments with heavy flat-irons, the little ones playing on piles of cloth or unfinished clothing. These latter with the children playing about them are the mysterious agents which as newly made garments are not only capable of spreading tuberculosis, but are frequently the very medium whereby more acutely contagious diseases such as smallpox, diphtheria, scarlatina, and measles are carried into the homes of the well-to-do. The description of the home we are visiting has already told you that we have before us a small sweat-shop. Without questioning we recognize in the young mother and in her unmarried sister the two coughers. We venture to ask them as to their condition, but they tell us that they are well. One says she coughs only because she is going to become mother again, the other assures us she coughs only when she bends too intently over the machine or when the little ones raise too much dust. Both women are plainly in a state of evolution of pulmonary tuberculosis. Both expectorate freely, and, alas! indiscriminately, spreading their disease among their own kin and others. They have not yet consulted a physician, they did not feel the need of one, and besides this, it takes time and money. They get occasionally some patent cough-mixture in the nearby drugstore. As a matter of course, these cases belong to the class of unreported ones. Should these people ever move before their cases become known to the board of health they would leave the germs of tuberculosis in every portion of the rooms, and the new occupants would have all possible chances to contract the disease. For you must know that tuberculosis sputum retains its virulence in the dried state often for a long period of time, but especially so in places where fresh air and sunlight have little access.

Ducor, quoted by Dr. Park of the New York Health Department in his recent book, relates an instance of a healthy family having been infected with tuberculosis from living in a room which had been occupied by a consumptive two years before, and on examining the sputum-stained wall-paper not only were tubercle bacilli found in it, but upon guinea-pigs being inoculated with scrapings from the walls they died of tuberculosis.

We advise the two young women to call in a physician or to go to a dispensary, and urge them not to expectorate except into a vessel partially filled with water, and if this is impossible, owing to the crowded condition of their workshop, to use a small pocket flask for that purpose.

We have one more family on our list which we desire to visit. Again a cough reechoing in the hallway which would guide us even did we not know where to go. This cough which is heard on nearly every floor, recalls to one's mind a hospital ward of consumptives. Our third visit leaves a less painful impression, for the rooms we enter are clean. The sufferer is a wid-

owed mother. Thanks to the conscientious advice of the physician the disease seems to be here under control and confined to one member of the family. There is little hope for her recovery, and her total helplessness makes it necessary for her only maiden daughter, otherwise a regular breadwinner, to remain at home and consecrate her entire time to the nursing of the mother. In the home and the faces of both of these women one can still see the traces of refinement and culture. What calamity has brought them into these surroundings must remain their secret. But we know that only with reluctance do they accept the much needed help which comes to them regularly through the medium of the Charity Organization.

Such and sadder pictures you can see daily in visiting the tenement homes of our city. To many of you the thought may have come: why are these people not in a hospital? I must answer you by saying that there is no room for them.

But what can we do to stop this plague if there is no room for the advanced cases in the hospital and no sanatorium for the cure of the incipient cases? I believe I may modestly claim that I am an ardent advocate of the establishment of sanatoria and special hospitals maintained by the authorities and private philanthropy, and other public measures to stop the spread of tuberculosis, such as better sanitary laws, more public baths, parks, and play grounds, especially in the crowded tenement districts, proper physical and hygienic education in our schools, etc.

While the realization of these institutions and proposed improvements will do a great deal toward the decrease of tuberculosis, the greatest factor in solving the tuberculosis problem will, however, be the proper housing of the poor. As long as the law will permit tenements to exist, or to be constructed anew, which, owing to the lack of air and light and want of cleanliness constitute veritable hot-beds of tuberculosis, so long will sanatoria and special hospitals serve only as recipients of the supply of tuberculous patients daily created anew.

Tuberculosis is a preventable and curable disease. Let us emphasize these important points in our crusade against it. In spite of all the opposition which we have encountered I do not fear but that ere long we will have a state sanatorium for the treatment of incipient cases and a special hospital in the vicinity of the city, which will be followed by the establishment of numerous institutions by private philanthropy. My faith in the wisdom of our statesmen and city fathers, and in the generous hearts of the American philanthropists, is too great for me to falter in my hopes. Such institutions—sanatoria and special hospitals—will serve to cure those already afflicted with the disease; but the model tenement house and the model tenement house management will be the greatest factors in preventing the development of the disease. Though when we consider that we have in this city alone more than ten thousand poor consumptives, those new and model tenements will probably also have to harbor at times a few tuberculous patients; but how much brighter prospect have they of being cured in these new houses with plenty

of light and air, perfect ventilation in all rooms, complete sanitary arrangements, and the absence of filth, dirt, and sickening odors.

Since consumption can be successfully treated in nearly all climes and the essentials of the modern treatment of tuberculosis are plenty of fresh air and light, good food, and judicious medical supervision, the probability of treating successfully an intelligent consumptive patient, even at his home, must certainly be an assurance to us all, since we know that there will not be room enough for all these patients in the institutions. The danger of infection from such a patient in a model tenement house can be reduced to a minimum, and the same might be said in regard to other contagious diseases.

In Germany it has been proposed that in order to control and combat tuberculosis successfully, every person should submit himself to a periodical examination for the possibility of a tuberculous disease, and that this examination should be compulsory like vaccination.

As to the advisability of inaugurating such a movement in our own country I prefer to suspend judgment; but if I should be the fortunate owner of a model tenement house, I certainly would make the medical examination obligatory for all those who desired to become my tenants. Should there be one, two, or even more among them with incipient tuberculosis, I would not refuse to these the blessing of a sanitary home, which, as long as we have so few special institutions, will certainly be an addition to their chances of getting cured. But I would have everyone of these prospective pulmonary invalids instructed individually as to the precaution he has to take concerning his infectuous sputum, and urge him to place himself under medical treatment. I would warn him that though the hospitality of this model tenement house had been extended to him, if he ever wilfully violated the given instructions and regulations concerning the disposal of his expectorations he could no longer remain in the house. Let me remark here incidentally that the application of this injunction constitutes the essential part of the discipline in sanatoria and special hospitals in our own country and abroad. Any wilful violation means immediate dismissal. It is this precaution whereby the healthy individual is more protected from contracting the disease in these very homes for consumptives, than probably anywhere else outside of them. I could verify this statement by statistics which I have published before in connection with this subject, but I will refer here only to one of our home institutions, the Adirondack Cottage Sanatorium, under the direction of my esteemed friend, Dr. E. L. Trudeau. During the fifteen years of its ~~existing~~<sup>ence</sup> not one of the medical attendants and nurses who have lived and labored there in close contact with hundreds of consumptive patients, has ever contracted pulmonary tuberculosis. Thus, I believe, the model tenement house could also be made a place safer from the danger of contracting pulmonary tuberculosis than any other. But I would go even a little further in my precautions to avoid a repetition of such sights as we observed in our wanderings through the tenements of the city. I would see to it that all the tenants should get a sufficient knowledge of what to do in case there is a patient suffering from a

communicable or contagious disease in their midst. Leaflets such as the Pennsylvania Society for the Prevention of Tuberculosis issues for distribution should be placed at regular intervals in the hands of the tenants. The titles of some of these leaflets are as follows: "How to Avoid Contracting Tuberculosis." "How Persons Suffering from Tuberculosis can Avoid Giving the Disease to Others." "Predisposing Causes of Tuberculosis and How to Avoid and Overcome them." In short, I would found a local society for the prevention of tuberculosis composed of my tenants and those of other model tenement houses. I would institute reunions and invite physicians and sanitarians to address them, not only on the prevention of tuberculosis, but also on the prevention of other diseases. If I could besides this succeed in procuring one of those noble women who could teach to the women tenants the art of good and economical cooking and careful housekeeping, and procure for all men, women, and children alike, such educational and social features as would make their home-life happier and brighter, I would think that the ideal of housing the poor was attained.

After the description of all that you have heard and seen since this splendid exhibition has been opened, there is no need for me to tell you of the urgent necessity of better laws concerning the building of tenement houses, and you all will realize that it becomes our duty as men and citizens no longer to tolerate existing conditions. But in the meantime I think we should combine our individual efforts to further all such enterprises which, independent of legislative help, will attain the same end. Though we may not reap what we sow, as our worthy Chairman, Mr. Frederick W. Holls, at the opening of this exhibition so beautifully suggested, let us sow our grains nevertheless, and let us sow them well and diligently. In the proper housing of the laboring classes lies the welfare of the community and the sanitary, social and intellectual prosperity of every citizen.

Think of the difference between the old tenement which we desire to abolish and the new which we desire to erect, and you will need no further incentive. The one, a beehive of humanity living in filth and dirt, well nigh without light and air, but with a multitude of sickening odors; with no attractions to foster home-life, virtue and temperance; disease breeding in every room; a hot-bed of tuberculosis and other contagious diseases from which are spread the foci of infection throughout the city among old and young, poor and rich alike. The other, a well-regulated city within a city, its citizens living in airy sunny rooms, in modest but attractive homes, which make the longing for the rumshop less, and create a love for temperance and purity. A home where infectious diseases can be controlled and from which the most bitter foe of mankind, "the great white plague"—consumption—can be ultimately and lastingly banished.



YALE  
MEDICAL LIBRARY



HISTORICAL  
LIBRARY

COLLECTION OF

Alfred P. Klets

old Klets number 4713

Accession no. ACK

Knopf, Sigard A.

Author

The tenement and

tuberculosis : an

address ..

Call no.

19th AC310.5

cent K56

1900

